Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

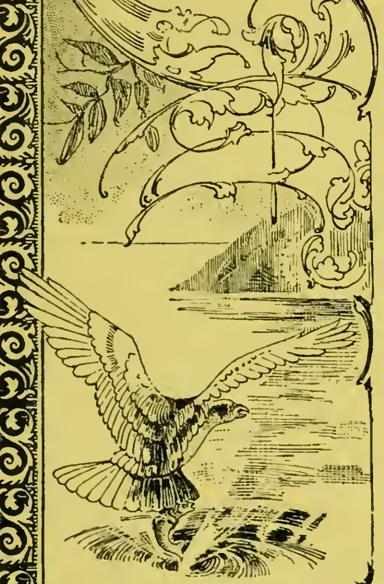
http://www.archive.org/details/ospreyillustrate05n09newyuoft

F
Biol.
O

VOLUME V. SEPTEMBER, 1901. NUMBER 9.

THE OSPREY

AN ILLUSTRATED MONTHLY MAGAZINE of ORNITHOLOGY



The Osprey.

LIBRAR
FEB 15 1932
UNIVERSITY OF TO

CONTENTS.

FRONTISPIECE.
The Starting Point at Digg's House 130

ORIGINAL AND SELECTED ARTICLES.
Song Birds of the Kissimmee Valley, Florida. By William Palmer Washington, D. C. 131
A Visit to Otter Rock, Pacific Ocean. "Among the Sea Birds". By A. G. Prill, M. D., Scio, Oregon 133
Notes on the Blue Grosbeak, Guiraca coerulea. By W. Daniel, Jr., Lynchburg, Va. 135
William Swainson and his Times.—X. By Theodore Gill, Washington, D. C. 136
Cage-Birds of Calcutta—II. By F. Finn, Deputy Superintendent, Indian Museum, Calcutta 138
The Osprey or Fishhawk: its Characteristics and Habits.—VIII. By Theodore Gill, Washington, D. C. 141

COMMENTS.
Work and Worry for the Classicists 142

LETTERS. (Postponed.)

NOTES.
Another Instance of the Spotted Sandpiper (Actitis macularia) Carrying its Young.—A Few Notes from Missouri.—Attempted Introduction of Capercailzie.—The death of Francis Joseph Birtwell 143

LITERATURE. (Postponed.)

J. MANZ & CO. CHICAGO

THE OSPREY COMPANY,
321-323 4½ STREET, WASHINGTON, D. C.

ENTERED AS SECOND-CLASS MAIL MATTER AT THE WASHINGTON, D. C., POST OFFICE, 1898.

BACK NUMBERS OF THE OSPREY.

A Few Complete Sets of Volume Two at $1.50 Each.

We can no longer supply Volume One at any price.
We have a few odd numbers of Volume One at an average price of fifty cents each.

Prices Quoted in this Statement are Subject to Advance Without Notice.

Subscription for Volume Two will be accepted at $1.50, until further notice.

Order promptly, as we cannot supply many numbers.

Address **THE OSPREY COMPANY**, 321-323 4½ Street N. W., Washington, D. C.

Articles intended for publication, Books for review, and Exchanges, should be addressed to THE EDITOR OF THE OSPREY, 321 and 323 4½ Street, N. W., Washington, D. C.

Subscriptions and Advertisements should be addressed to THE PUBLISHERS OF THE OSPREY, 321-323 4½ Street N. W., Washington, D. C.

Terms: In the United States, Canada and Mexico, $1.00 a year in advance; 13 cents a number.

THE OSPREY COMPANY, 321-323 4½ Street N. W., Washington, D. C.

WANTED.

GOOD PHOTOGRAPHS
OF BIRD NESTS,
BIRDS AND ANIMALS,
IN EXCHANGE
FOR SIMILAR
PHOTOGRAPHS.

PAUL BARTSCH,
Smithsonian Institution,
Washington, D. C.

—PRINTING.—

100 ENVELOPES AND
100 NOTE HEADS PRINTED,
POSTPAID, 75C.

No amateur work. Satisfaction guaranteed.
Samples for 4 cents in stamps.
All kinds of printing for collectors.

PEARL PRINTERY,
46 Theresa Street,
Cleveland, Ohio.

BERNARD J. BRETHERTON,
Professional Ornithologist.

Mounted Specimens, Study Skins. Nests and Eggs, or rough Skeletons and Alcoholics, collected and prepared to order, for sale. Correspondence solicited.

NEWPORT, - - - - OREGON.

J. A. ALLEN, Editor. FRANK M. CHAPMAN, Assoc. Editor.

THE AUK.

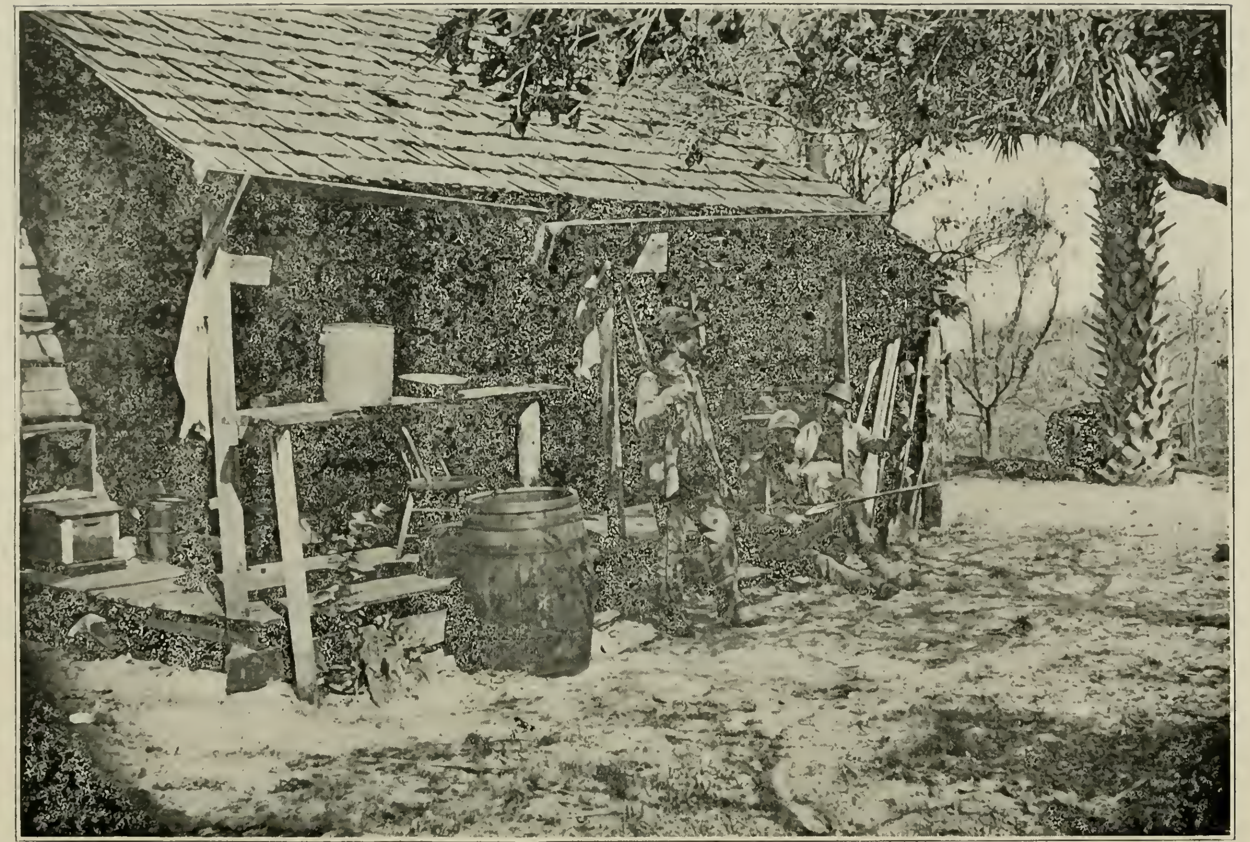
A Quarterly Journal of Ornithology.

Official Organ of the American Ornithologists' Union.

As the official organ of the Union, "The Auk" is the leading ornithological publication of this country. Each number contains about 100 pages of text, a handsomely colored plate, and other illustrations. The principal articles are by recognized authorities, and are of both a popular and scientific nature. The department of "General Notes" gives brief records of new and interesting facts concerning birds contributed by observers throughout the United States and Canada. Recent ornithological literature is reviewed at length and news items are commented on by the editors. "The Auk" is thus indispensable to those who would be kept informed of the advance made in the study of birds, either in the museum or in the field.

Price of current volume, $3.00. Single numbers, 75 cts.

Address **WILLIAM DUTCHER, Treas.,**
525 Manhattan Avenue, NEW YORK CITY.



THE STARTING POINT.

ROBERT RIDGWAY (STANDING). E. J. BROWN (IN MIDDLE). WILLIAM PALMER (SITTING ON FLOOR).

Digg's House, Orange Hammock, Kissimmee River, Florida.

The Florida Cardinal and the Florida Wren were in the habit of breeding yearly under the roof of this porch.

THE OSPREY.

An Illustrated Magazine of Popular Ornithology.

Published Monthly.

VOLUME V. SEPTEMBER, 1901. NUMBER 9.

Original and Selected Articles.

SOME BIRDS OF THE KISSIMMEE VALLEY, FLORIDA.

BY WILLIAM PALMER, Washington, D. C.

Observations of the following birds were made during a month spent in Florida, in February and March, 1895, in company with my friends, Mr. Robert Ridgway and Mr. E. J. Brown. We had intended to take a steamer down the Kissimmee River, but were compelled to hire a sailboat to go as far as the middle of Lake Kissimmee from which we footed it some twenty-five miles further south, our baggage going on a wagon. Our destination was Orange Hammock on the Kissimmee River a few miles above Fort Kissimmee. Here we camped for 22 days on the place of Mr. J. W. Driggs, a former Alligator hunter who at one time had collected specimens of birds.

Sky, water, prairie, pines, sand, palmettoes, flatness, are common in this region; all else are occasional and scarce and simply serve to make a slight change in the landscape. We were unfortunate as to the time of our trip for the two great frosts of that year occurring just previous to our visit had largely destroyed the tender vegetation and especially the flowers and oranges, and had undoubtedly affected the bird-life.

The word 'Hammock' is used in the Kissimmee Valley to designate two very dissimilar places. The ordinary use is intended for those places of irregular size and shape which are merely of a little higher elevation than the level of the surrounding country and densely covered with a growth of plants, principally live oaks and bushes. The clearing of these places and the planting of orange and other fruit trees together with the building of a sometimes somewhat indifferent house, have resulted in the nearest approach to civilization that the country affords. The other kind of Hammock has had an entirely different origin and calls for a more extended notice, especially as they are the homes of various species of birds not usually found in the other.

On the prairies, in the pine woods, along the edges of the swamps and never on the large 'Hammocks' already described, are many circular depressions of varying depths and diameters, usually not more than ten feet deep, and from thirty feet to a quarter of a mile in extent. The most numerous are perhaps a hundred feet or so across. Sometimes these occur singly, then again several exist close together rarely; two or three unite or nearly join, in fact; they occur entirely at random, but never in the swamps as far as I know, and not usually in the pine woods. I often speculated as to the origin of these depressions, but with no result until I became aware of the character of the substrata. The explanations I have to offer are based on my experiences, and may or may not be correct; at any rate they seem to fit the case. The loose surface sand of the Kissimmee Valley region, which is almost its only soil, is from two to six or eight feet deep and rests on a comparatively thin stratum of a soft brown sandy clay 'rock', a rock only in name, but designated so in the country. In places bog iron exists on the surface of this so-called rock which is thus hardened, and where it is exposed on the surface it also becomes hardened by the weather. The accumulated rains, often abundant and covering miles, soften this layer of clay rock and percolate through in many places, causing small channels through which the fine sand of the surface is carried, resulting in surface depressions or sinks varying in size according to the character of the channel in the clay. These sinks are always full of water during the rainy season, but are often dry or contain but little water in the winter. The second class of 'Hammocks' are formed in the following way from these 'sinks'. Particles of vegetable matter are carried to the centers and choke up the channels, and eventually form slight mounds in which seeds of various trees germinate and grow during some favorable season. Thus we find depressions containing varying depths of water and containing one or more cypress trees always in or about the center with deeper water surrounding them. As the central mound of such depressions increases in size and height, gum trees gradually take the place of the cypress to the exclusion of all other trees. But in some, especially the larger sinks with a larger and higher central mound, many species of trees, shrubs and low plants combine to form a thick, almost impenetrable mass, and thus where these occur in the pine woods we have the 'Bays' of the country. Many of the shallower sinks are entirely filled with cypresses, often large, usually uniform in size. In many, the cypress and gum trees have entirely disappeared, the central mound has nearly filled the depression, and the center is even higher than the surrounding prairie. Live oaks, bogs and cabbage palmettos have taken possession, and thus we have 'Hammocks' always circular and usually disassociated from other groups of trees. Many of these depressions never contain trees, merely water, while others have the center entirely filled with sawgrass and a few bushes. In some, masses of grass may occupy various places. A few may contain a single tall tree; a few bushy trees will surround this, then saw palmettos will form an impenetrable mass twenty to forty feet wide entirely around, and a ring of water thirty or more feet across with a border of short grass, and then the saw palmetto of the prairie surrounding the whole. No two are exactly alike, but every stage of the evolution can be found. They form ponds or islands in the open landscape or in the pine woods, and were solitary or numerous in a small area.

Many of these larger sinks which remain wet almost the entire year are really cypress swamps, this species filling them to the exclusion of other species whenever low wet areas exist, especially along the shores of the lakes, but they are unknown along the entire course of the Kissimmee River, doubtless owing to the great difference between high and low water and its rapidity.

Considerable of the land lying back from the river, but approaching it in various places, is covered with a scattered growth of large pines.

The numerous fires made by the people to compel the growth of fresh green grass for cattle have resulted not only in preventing much of the growth of young pines, but have also killed out many of the larger and smallest so that they are much scattered, and there is practically no shade beneath.

The Kissimmee is a swift, but extremely tortuous river, and frequently doubles on itself. Thus in many places it is necessary to follow the course of the river for ten miles to make a progress of two. The letter S fails entirely to give any idea of this exceedingly crooked stream. The river is bordered on both sides with a fringe of dwarf willows, many bushes and many herbage plants, which often form a mass too difficult for a boat to penetrate, except at very high water. Many open places of irregular size and shape open into the river or border the prairies and often form cutoffs for boats. Rarely does the prairie ground form a river-bank.

Between the edge of the river water and the dry prairies is an extensive area, usually only a few hundred yards wide, of wet grassy land on which Killdeer, Jacksnipe and other waders were often abundant, and in the almost plant filled borders of the river and in the open places, Coots and Green-winged Teal were common together with a fair sprinkling of Louisiana Herons, White Ibises, Florida Ducks and other species. Back of this wet grassy area, the prairie begins, at first a few outlying islands of saw palmettos, then a dense grassy palmetto area stretching in places as far as the eye can see, and irregularly bordered by a sudden growth of tall pines. Almost impassable sloughs wind for miles into the pine lands. The distribution of the birds over these areas is by no means the same. Most of the birds remain in the swamps of the river, but a few scatter through the country, especially the Blackbirds and small Herons. Meadow Larks, Flickers and Mourning Doves are abundant about the edges of the pines, and a few Bluebirds, Jays, Shrikes and Hawks are easily found.

Red Poll and Myrtle Warblers were abundant about the open bushy ground together with numerous Robins. An occasional covey of Quail was flushed. In the Hammocks, occurred many of the land birds I have mentioned with Florida Wrens, the Southern Yellow-throat, the so-called White-eyed Chewink (which has not a white eye), the Florida Barred Owl, Red-shouldered Hawks, Red-bellied Woodpeckers and several species of warblers. The Bluebird was confined entirely to open place in the pines, especially near a pond. Taken altogether and deducting from the list Ibises, Blackbirds, Louisiana Herons, Robins, Red Poll Warblers, Myrtle Warblers, Savanna Sparrows, Coots, Blue-winged Teal, Jacksnipes. Meadow Larks, Robins and Doves, all other birds were scarce and one had to work hard to get a bag full. In all 112 species were seen of which I saw 38 for the first time alive. We left the town of Kissimmee on February 25, and returned on March 24.

1. Pied-billed Grebe. (*Podilymbus podiceps*).

Seen occasionally; one shot.

2. Snake Bird. (*Anhinga anhinga*).

Rarely seen; single birds. Saw about twenty, but two of them on the water.

3. Florida Cormorant. (*Phalacrocorax dilophus floridanus*).

Few seen on the lakes, rarer on the river.

4. Florida Black Duck. (*Anas fulvigula*).

Common on the Kissimmee and usually in pairs; shy and difficult to shoot.

5. American Widgeon. (*Mareca americana*).

A few seen and one shot.

6. Blue-winged Teal. (*Querquedula discors*).

Abundant on the river, usually in flocks of less than ten. On March 23, numerous, in large flocks on the upper part of the river near the lake. A male collected March 3, has a large triangular white spot in the center of the underbody. Usually found feeding in the shallow open water along shore.

7. White Ibis. (*Guara alba*).

Abundant, often seen in large flocks while flying to and from their roosting places. Occasionally in the middle of a bright day large flocks would circle upwards to a great height until it was difficult to distinguish single birds. Such flocks were composed of old birds; in only one instance did I see a dark immature bird with them. While flying to and from the roost the adult and immature birds remained separate. An adult male measured from tip of bill to end of tail 26.75 inches, and spread 42 inches, while an immature male was just one inch longer and half an inch more between tips of expanded wings.

While standing by the riverside one day I saw a line of these birds down the river. Instantly I thought of the gun, but it was too far to fetch in time; then the camera was thought of, but it could not be used for the same reason, consequently I could do nothing but watch. It was a most beautiful sight to see a line of these pure white birds stretching in a slightly wavy line entirely across the river, some seventy yards, and swooping down on one, and not six feet above the water. As it was useless to do anything else I stood perfectly motionless in full view, and the line of beautiful birds passed directly in front of me, the nearest not five feet away. Most of the birds never noticed me, but the three or four nearest, especially the end one, seemed a little suspicious, for they turned their heads slightly and examined me as they passed. It was the moment of a lifetime, and I never more regretted that my gun was far away tho' I wished almost as much that I had a camera; if I had, however, my movements would probably have caused them to swerve off long before they reached me.

8. Wood Ibis. (*Tantalus loculator*).

About seven birds seen, all flying.

9. Americhn Bittern. (*Botaurus lentiginosus*).

Seldom seen; but often heard "booming" during the latter part of our stay.

10. Great White Heron. (*Ardea occidentalis*).

Several seen in Cypress Lake on February 26.

11. Ward's Heron. (*Ardea wardi*).

A few seen at intervals.

12. Egrett. (*Ardea egretta*).

A colony was noticed at one place, and scattered individuals were seen usually about the ponds on the Osceola side of the river.

13. Snowy Egrett. (*Grazetta candidissima*).

One certainly identified, came several times to a small pond in the pines near Lake Kissimmee.

14. Reddish Egrett. (*Dichromanassa rufescens*.

Several seen nearly every day while about the river, usually in pairs.

15. Louisiana Heron. (*Hydranassa tricolor ruficollis*).

The most common Heron. Specimens taken as late as March 20, though laying or about to lay, were not in full plumage. While creeping on some ducks that were in the shallow water adjoining a prarie. I noticed several of these Herons that were watching my movements. They stood in the water perfectly erect with the bill pointed skyward and I could distinctly see the movements of their eyeballs as they watched me, their body being perfectly motionless. They evidently thought themselves unseen or were deeply attracted by the peculiar creeping thing.

(*To be Continued.*)

A VISIT TO OTTER ROCK, PACIFIC OCEAN.

"Among the Sea Birds".

By A. G. Prill, M. D., Scio, Oregon.

Otter Rock is a barren rock about thirteen miles north of Newport, Oregon, and about a mile and a half at sea opposite Cape Foulweather. The entire area of this rock is perhaps half an acre and, as will be seen by the accompanying photograph, consists of a high almost perpendicular rock, and a lower or flat portion which is covered at high tide. The higher part is perhaps one hundred to one hundred and fifty feet high, rising on nearly all sides perpendicularly from the ocean. This rock is the breeding place of many sea birds and it is of a visit to this place in quest of specimens that I am about to relate.

On June 27, 1899, in company with Doctor Hill of Albany, I reached Newport and during the evening we made a small collection of starfish which are very numerous there. Strolling up the beach we watched the many hundreds of Sea Gulls and other sea birds. That evening we engaged a man to take us to the light house, a distance of five miles, the following morning. So on Wednesday morning we were astir early and soon arrived at Yaguina head-light house. Here we had the pleasure of meeting B. J. Bretherton, First Assistant, a naturalist through and through to whose kindness and daring, I am indebted for the specimens we secured.

Near the light house, on perpendicular walls of rock, many Violet-green Cormorants nested. As we were desirous of securing eggs of these birds, Mr. Bretherton would not consent to our leaving until supplied. So starting out with one hundred feet of good rope, we soon reached the cliffs, and friend Bretherton was lowered over them, suspended in mid air between ocean and sky. Five sets of eggs of the Violet-green Cormorant were secured after several descents. Three sets contained four eggs each, and two sets three. Their color is dirty white with a slight greenish tinge, and they are covered with a chalky deposit. The eggs are slightly more pointed at one end than the other. The size which is a fair average, of set ¼ is as follows: 2.24 x 1.48; 2.08 x 1.36; 2.28 x 1.44; 2.11 x 1·37.

Returning to the light house, we made arrangements to visit Otter Rock on the following day, and again secured the valuable assistance of Mr. Bretherton for the proposed trip. We went back to Newport well pleased with our day's work, and engaged three expert seamen to take us out to the Rock by boat. The following morning we drove twelve miles up the beach where our boat was to meet us, and soon we were all aboard and off for the rock.

Landing on the rock is hazardous, especially for those who are not accustomed to such work, but it was successfully made and one of the seamen took the boat out and away from the rock to keep it from being battered to pieces. Thousands of Gulls, Terns, Tufted Puffins and Cormorants filled the air as we approached and landed, and soon, after a tortuous climb, we found ourselves on the summit of Otter Rock. There the rocks were covered in places with sea weed, and we found slight depressions showing where many nests had been but were then vacant. Many young Gulls, only a few days old, were found, as well as many sets of three eggs in which incubation was far advanced. The Western Gull and Glaucous Winged Gull breed there; their nests are simple depressions in the sea weeds in which their three eggs are deposited. The average size of a set of the former is 2.55 x 1.86 and they are of a light grayish olive ground color, blotched and speckled with dark and light shades of brown and lilac, some of the spots appearing to be beneath the surface.

The odd and grotesque appearing Tufted Puffin or Sea Parrot breeds on Otter Rock and although we saw many of the birds, only one set, which consisted of a single egg, was taken. These birds nest in the deep crevices of the rock, often beyond the reach, and in places where it is impossible to get. The eggs are plain dirty white, and measure 2.86 x 1.90.

The Violet-green Cormorant nested on the sides of the perpendicular rock, on projecting shelves just wide enough to hold some weeds, grass and the eggs. As Mr. Bretherton desired a few sets of the eggs, he was again lowered, and secured two sets; one of five eggs, an unusually large set, and one of four eggs. While he was making the descent, I took the photo. in which you see him about twenty-five feet down and reaching for a set.

The Pigeon Guillemot and Oyster Catcher also nest there but no eggs of these birds were secured on Otter Rock, although on the homeward trip the seaman secured a single egg of the latter for me. The color of the egg was drab, blotched and speckled, chiefly at the larger end, with dark brown. The egg was only slightly narrowed to a smaller point at one end, and its measurements were 2.20 x 1.42. Time was fast flying and the roar of the incoming tide warned us that we must leave, so climbing down to the lower portion of the rock, we were soon aboard the boat with our specimens which, although few in number, were highly prized because of the effort it cost to secure them. I suceeded in getting several fine specimens each of the Gulls, Oyster Catchers, Murre, Puffins, Murrelets and, Cormorants, and have them mounted in my collection.

COLLECTING EGGS OF THE VIOLET-GREEN CORMORANT.—OTTER ROCK.

NOTES ON THE BLUE GROSBEAK, GUIRACA COERULEA.

By John W. Daniel, Jr., Lynchburg, Va.

In Virginia, the Blue Grosbeak is a species widely distributed, occurring coastwise and in the mountainous portions as well as throughout the Piedmont region, although it does not appear to be a very abundant bird in any portion of the state. Dr. W. C. Rives has found it to be a fairly abundant summer resident in Eastern Virginia, and has found its nest and eggs in Albemarle County.

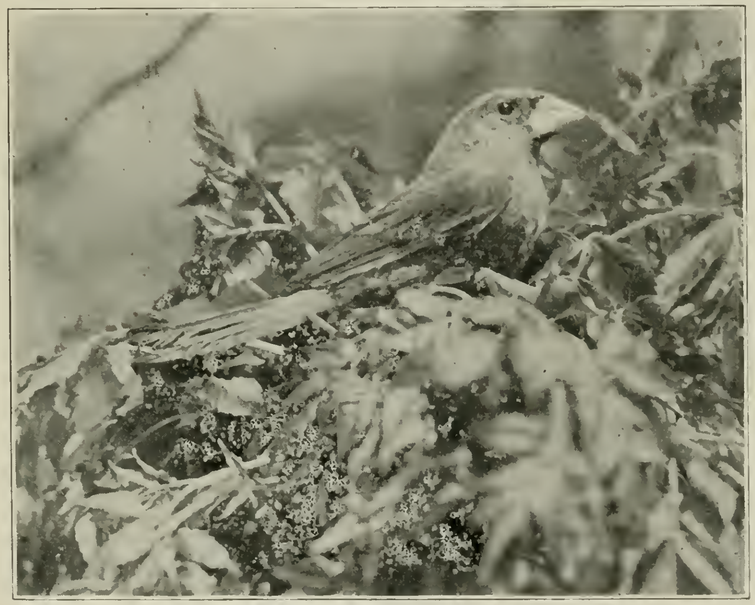
I have observed it during the summer, in Fauquier, Alleghany, Rockbridge and Campbell Counties, which are widely separated and likewise different as regards temperature. In Campbell County, the birds arrive from the south late in April, but nest building does not commence earlier than the first week of June. During the interim, the birds are usually to be found in pairs in the neighborhood of the intended breeding locality. The species shows a marked disposition to return to the same locality, in successive years, to nest. Peach orchards are favorite nesting haunts, the nest as a rule being placed among the upright sprigs of a young tree. Old fields with scattering growth of sassafras (*Sassafras officinale*) are frequently selected, as the latter shrub seems to be in high favor with the species, and the greater per cent of the nests I have observed have been placed in it.

During the breeding period, it is usual to find the birds in isolated pairs; they do not appear to be sociable birds. As in the case of the Crested Flycatcher (*Myiarchus crinitus*), cast-off snake skins enter as a queer feature of the nest composition. They are probably used with the instinctive purpose of frightening intruders, but whether they serve such a purpose is a matter of much doubt. Shrivelled and shapeless as a skin invariably is, it bears but slight resemblance to a snake, and it would require a very discerning Chipmunk or Blue Jay to make head or tail out of it; yet nearly every nest contains it as though it rendered important service.

During the first week in May, 1901, I met with several Blue Grosbeaks near Lynchburg, Va., where the bird is a fairly abundant summer resident.

On May 5th, I shot a male Grosbeak, and as I only slightly wounded it in the wing I took it home. After a couple of weeks of nursing and feeding the bird was released, but not before I had attempted to photograph it. After several failures, I secured the picture which accompanies this article. The bird was placed upon a well-leafed branch of a shrub and focused upon. When the proper focus had been secured, I found the bird had closed its eyes and gone to sleep. When I attempted to arouse him, he at once left the branch for the ground and skurried away amongst the high grass. After a lively chase I got him once more, and posed him. Just previous to pressing the bulb, I attempted an imitation of the call note the species utters. The bird became animated and the bulb was pressed in time to catch the animated expression as shown in the picture. Later the bird was released.

During the early part of September, Blue Grosbeaks frequent the ravines grown up with bushes, and feed upon various kinds of weed seeds. They depart for the south about the last week of September.



THE BLUE GROSBEAK.

WILLIAM SWAINSON AND HIS TIMES.—X.

By Theodore Gill, Washington, D. C.

(*Continued from Vol. V, page 72.*)

In 1832 Swainson had correspondence with Charles L. Bonaparte, Prince of Masignano and Canino then resident at Rome, relative to drawing plates for the latter's work. Bonaparte, in a letter of 6th April, 1832, agreed to Swainson's charge, three guineas a plate. Bonaparte also agreed to bring a copy of the bird volume of the Fauna Boreali-Americana.

THE CABINET CYCLOPÆDIA.

We must now pass on to the work which occupied the last years of Swainson's life in Britain and which gave him the greater part of his living. This was the preparation of the series of volumes for which he had contracted with the great firm of Longmans & Co., of London, to furnish for "The Cabinet Cyclopædia" edited by the Rev. Dionysins Lardner.

The editor of the "Cabinet Cyclopædia," Dr. Dionysius Lardner, a celebrated character of the time, "had resolved to engage a party of naturalists to execute the zoological series; and a long list of names had been given him, many of the highest repute, who were to take the several portions." Swainson has not named any of these, but from another source we may learn who they were.

A list of 32 gentlemen who had promised to contribute to the Cabinet Cyclopædia was given in an announcement by Longman & Co., in the Literary Gazette for November 7, 1829, (p. 734). The "party of naturalists to execute the zoological series" included nine gentlemen; their spheres were not stated, but guesses as to what they might have written about are indicated within parentheses. The nine were Thos. Bell (Reptiles?), Edw. Turner Bennett (Mammals?), Rev. Jno. Fleming (Philosophy of Zoology?), J. G. Children (Insects, etc.?), T. Horsfield (Birds?), Wm. Sharp MacLeay (Insects?), Geo. B. Sowerby (Molluscs?), N. A. Vigors (Birds), and and Wm. Yarrell (Fishes).

Swainson fancied that "the unfriendly feeling entertained towards [him] by an individual, whom the editor empowered to organise this undertaking, was . . . the reason why [his] assistance was never asked. Promises, indeed, were continually made to the editor that some of these volumes would be 'soon' ready; but after waiting near three years, not even one was forthcoming. Finding, therefore, that, from some unexplained cause, nothing was produced from this imposing array of great names, recourse was had to the only naturalist of the least repute, whose services had not been thought worth securing. To make 'a long story short', a proposition was made to [him], that the Encyclopædia of Zoology should be remodelled and transformed into the Cabinet of Natural History." He "foresaw that this would almost impose on [him] the necessity of rewriting the whole work; but felt flattered in being thought equal to the task," and "the agreement was therefore concluded".

The first of the volumes published in the series was the Introductory one which appeared in 1834 and was entitled "A Preliminary Discourse on the Study of Natural History". Although there is much of interest in it we must pass it by.

The first was soon followed by a second volume published in 1835; it was "A Treatise on the Geography and Classification of Animals".

THE CIRCULAR THEORY.

In this he gave an elaborate exposition of his views of classification and of his modification of the "circular theory of MacLeay. An outline of Swainson's views on his first "adoption of quinarianism" and then published in 1824 has already been given (Osprey, vol. 4, p. 167). His latest and most authoritative statement is to be found in "A Treatise on the Geography and Classification of Animals" published in 1835. His ideas were so strange that fear of a charge of misrepresentation will render expedient a summary in his own language.

He entered upon a superficial historical survey of Zoology and gave a more detailed sketch of the classification on circular and quinary principles proposed by William Sharp MacLeay in his "Horæ Entomologicae" published in 1821. After this review he enunciates the following conclusions (p. 212).

"On a careful consideration, therefore, of the principles of natural arrangement developed by our author, they may be all comprised under one or other of the following:—1. The demonstration of the circular nature of affinities in natural groups; 2. The component parts of every group being regulated, in their variation, by some definite number; and, 3. The system of representation, by which the contents of one natural group are represented analogically by the contents of other groups. This last law, indeed, was not suspected to be universal; but merely confined to one in every fifth group. The theory of analogy and affinity comes also under this latter head; being in fact, one of the tests or proofs to be applied. Such are the fundamental principles of classification contained in the *Horæ Entomologicæ;* the modifications which they subsequently received from its author, will be presently stated".

He first presents his modification of the circular theory and his own peculiar views in the following statement (p. 224).

"In submitting to the zoological world—for the first time in a connected form—the result of our researches on the first principles of the NATURAL SYSTEM, it seems the most simple and preferable method to state them, as heretofore*, in the form of distinct propositions, which we shall endeavour to substantiate by subsequent details.

---

*See Fauna Boreali-Americana (Northern Zoology), vol. ii, pref. p. 48.

"I. That every natural series of beings, in its progress from a given point, either actually returns, or evinces a tendency to return, again to that point, thereby forming a circle.

"II. The primary circular divisions of every group are three actually, or five apparently.

"III. The contents of such a circular group are symbolically (or analogically) represented by the contents of all other circles in the animal kingdom.

"IV. That these primary divisions of every group are characterised by definite peculiarities of form, structure, and economy, which, under diversified modifications, are uniform throughout the animal kingdom, and are therefore to be regarded as the PRIMARY TYPES OF NATURE.

"V. That the different ranks or degrees of circular groups exhibited in the animal kingdom are NINE in number, each being involved within the other".

He then proceeds to give an attempted full exposition and demonstration of these five propositions in regular order.

First, he endeavors to give an idea of what he means by what he calls a "Natural", otherwise "Circular" assemblage of animals (p. 225).

"The progression of affinity in any assemblage of animals is known to be natural, if it is circular. This is shown when, by beginning at some one point of the series, and following closely the line of affinity, we are imperceptibly conducted to that point again. The two extremities of the series will thus obviously be united; and this union, of course, gives us the figure of a circle. Between the two points, thus blending into each other, a greater or lesser number of modifications of form, in the intervening animals, will occur, depending entirely on the greater or lesser extent of the circle we are tracing. These deviations, however (as will be hereafter shown), are all upon a uniform plan; and, besides, in all cases, are *secondary*, or inferior, to the leading characters of the whole assemblage, which—in one way or another—they all retain. Such a circle is called a natural group: the whole group being employed, on this occasion, to designate, indiscriminately, every series or assemblage of beings, whose affinities have been so made out. When such a series is so gradually developed that no link in the chain of continuity appears wanting, it is then termed a *perfect* group. But when a part of the series is perfect, and the other part presents the idea of a chain where several of the links are wanting, then the group is called *imperfect*".

Second, he takes up the question of Number and urges that Three is the predominant number, and that the subdivision of one of the three into three minor circles is the basis of MacLeay's conception of five as the regnant number (p. 226).

"As it is manifest that every group, according to its magnitude, will exhibit more or less variety in its contents, the first question which suggests itself is, Are these variations regulated by any definite number? And is that number so constant, in all such groups as have been properly investigated, as to sanction the belief that it is universal? The answer is in the affirmative. Every group, whatever may be its rank or value, (that is, its size or its denomination,) contains, according to our theory, *three* other *primary* groups, whose affinities are also circular. One of these is called the *typical*, the other the *sub-typical*, and the third the *aberrant* group. This latter is so much more diversified in its contents (for reasons hereafter to be stated) than the other two, that many naturalists reckon *five* groups in all; the number *five* being made out by dividing the aberrant group into *three*, instead of considering it as only *one*".

Third, he enters on a consideration of the degrees or kinds of resemblance and the supposed difference between what he calls Affinity and Analogy (p. 230).

"There are, in nature, two sorts of resemblances, which are termed *analogy* and *affinity*. We have so fully explained these relations in our preliminary volume*, that it is only in consequence of our wish to exhibit in a connected series all the laws of natural arrangement yet discovered, that we now repeat, in some measure, the substance of what has already been stated.

"The most ordinary observer perceives, that every created being has different degrees of relationship or of resemblance to others. Where this is immediate, it is termed an *affinity;* where, on the other hand, it is remote, it is a relation of *analogy*.†

"The theoretic distinction between affinity and analogy, in a more scientific point of view, has been thus stated by the naturalist who first gave a definite meaning to the terms: "Suppose the existence of two parallel series of animals, the corresponding points of which agree in some one or two remarkable particulars of structure. Suppose, also, that the general conformation of the animals in each series passes so gradually from one species to the other, as to render any interruption of their transition almost imperceptible. We shall thus have two very different relations, which must have required an almost infinite degree of design before they could have been made exactly to harmonize with each other. When, therefore, two such parallel series can be shown, in nature, to have each their general change of form gradual, or, in other words, their relations of affinity uninterrupted by any thing known—when, moreover, the corresponding points in these two series agree in some one or two remarkable circumstances, there is every probability of our arrangement being correct. It is quite inconceivable that the utmost human ingenuity could make these two kinds of relation tally with each other, had they not been so designed in the creation.

(*To be Continued.*)

---

*Preliminary Discourse on Nat. Hist.

†There cannot be a better proof of the low ebb to which the higher departments of zoology have sunk and the ignorance of those persons who are engaged to write reviews of scientific works for the daily press, than the fact of one of those critics, who undertook to censure our former volume, being totally unacquainted with the difference between *analogy* and *affinity!* To him, it seems, they are only synonymous with "resemblances," and such "resemblances" forsooth, are to be ridiculed!

THE CAGE-BIRDS OF CALCUTTA.—II.

By F. Finn, Deputy Superintendent, Indian Museum, Calcutta.

FAMILY EULABETIDÆ.

The common Hill-or Talking-Mynah (*Eulabes intermedia*) is one of the best-known cage-birds in Calcutta, being brought into the Bazaar by scores at a time, which include both adult and newly-fledged specimens. As everyone knows, some of these birds are very fine talkers, but I have only heard one that was really good, whose imitation of the human voice was perfect. They often prove but short-lived pets, and I am inclined to think that the "*satoo*"-diet is too rich for these fruit-eating birds, as they usually seem to die in fits, and those I have handled have been very plump and heavy and were probably unduly fat. Recently I saw one with a nearly white iris, the only such specimen I have ever observed among a great number of individuals from India and the Andamans. The smaller Talking-Mynah (*E. religiosa*) is not often caged here, and I have seen no other bird of this family in captivity.

FAMILY STURNIDÆ.

As might be expected where the family is so well represented, the various Starlings and Mynahs are often seen caged. Much the commonest of them is the ordinary *Acridotheres tristis*, which is even more commonly kept than *Eulabes intermedia*, and sometimes talks nearly or quite as well. It also becomes so tame that it may be allowed full liberty. I have seen several more or less perfect albinos of this species in confinement; two very curious specimens are at present in the Calcutta Zoological Garden, for which I procured them from Mr. Rutledge. Both were white when he first obtained them, but one has now completely assumed the normal coloration of the species, and the other has partly done so. A similar phenomenon occurred with a common Babbler (*Crateropus canorus*) recently in his possession, which unfortunately escaped.

Another common Starling (*Sturnopastor contra*) is frequently seen caged, and from its very sweet liquid notes is certainly better suited than any other of its family for a pet. It does not appear to have been noticed that the colouration of the soft parts of the young of this species is quite different from that of the adult, the bill and legs being black, with the inside of the former orange, while in old birds the legs are white and the bill orange and white, with the inside of the mouth black.

All the other common Indian Starlings may be seen at times caged in Calcutta namely: *Acridotheres ginginianus*, *Æthiopsar fuscus*, *Sturnus menzbieri*, *Pastor roseus*, *Temenuchus pagodarum* and *Sturnia molabarica*. The last two are known as *Pawi*, and this title is shared by *Sturnia andamanensis*, which is occasionally imported and is called "*Sada Pawi*," *Sada* meaning "white." *Graculipica nigricollis* is also brought in small numbers from China. The male is a most amusing bird, with his habit of erecting his crest and bowing and muttering to visitors.

FAMILY MUSCICAPIDÆ.

The only Flycatchers I have seen in captivity here are *Stoparola melanops* and *Niltava sundara*, of which a few have been brought down from the North and have thriven very well on the *satoo*-and-maggot regime.

FAMILY TURDIDÆ.

As in other countries, the birds of this family are popular captives here. In fact, if a census of cage-birds of Calcutta were taken, I should expect the Shama (*Cittocincla macrura*) to come very near the head of the list, as it is extensively kept, and thoroughly deserves its popularity on account of its splendid song. Indeed, after the common Green Parrot, it might, I think, be called the characteristic cage-bird here. Many individuals are also sent to Europe where the species is yearly becoming better appreciated. Both wild-caught birds and hand-reared fledglings, still in the mottled plumage of immaturity, appear in the shops of the dealers, while the great majority of the birds exposed for sale are males. A few females may, however, be seen, being presumably hand-reared birds, whose sex could not be determined at first. These have given me the opportunity of observing that this favourite songster is a most pugnacious bird; the cocks will at once fight if put together, and so will the hens. At the same time, old wild-caught cocks and young spotted birds arrive, in many cases at least, in cages containing half a dozen or more, though Shamas are more usually brought in long wicker-cages divided by bars into separate partitions for the several inmates.

Other small Turdidæ not uncommonly kept are the "Dhyal" (*Copsychus saularis*) and the "Pidha" (*Pratincola caprata*). *Chimarrhornis leucocephala* is also occasionally brought down from the hills in the winter. The "Bulbul bostha," or true Eastern Nightingale (*Daulias golzi*), is sparingly imported at this season, the the birds fetching high prices—from fifty to two hundred rupees. I am told that a man will come all the way from Cabul with a few of these much-esteemed birds as his main venture.

Of the large Indian Turdidæ the only species at all frequent in captivity here are the "Kastura" (*Turdus boulboul*) and the "Dama" (*Geocichla citrina*), and I have not seen many even of these. A few English Song-Thrushes (*Turdus musicus*) have been imported, and do fairly well, but I have noticed that they are very liable to an overgrowth of the scaly covering of the feet. A silly attempt is now being made to introduce the Song-Thrush and Blackbird into Darjeeling, which is already well stocked with more attractive species of birds, especially *Lioptila capistrata* and *Liothrix lutea*.

FAMILY PLOCEIDÆ.

The typical Weavers of the genus *Ploceus* all occur commonly in the Bazaar, except the true *P. megarhynchus* (see Ibis, 1901, p. 29), which is unknown to the dealers. *P. atrigula* (*P megarhynchus* of the 'Fauna of British India') is often brought in as a young bird, and evidently breed near here. *P. baya* is only known as a bird brought down from Lucknow, most of the specimens being males. Many of that sex of *P. atrigula* show a few yellow feathers on the breast when in full plumage.

Foudia madagascariensis used to be occasionally imported in very small numbers, but I have not seen any lately.

Of the small Munias and Waxbills, *Sporæginthus amandava*, *Munia atricapilla*, *Uroloncha punctulata*, and *U. malabarica* are all very common, as might be expected. *Sticlospiza formosa*, *Munia malacca*, and *Uroloncha striata* are much less often seen, but may be obtained now and then. Intermediate forms between *M. malacca* and *M. atricapillla* often occur, and are doubtless hybrids. Wild specimens of *Uroloncha acuticauda* are rarely seen, but the domesticated Japanese race (known to home amateurs as the "Bengalee") is constantly present in the Bazaar, in one or other of its three forms—the brown-and white (grading completely into the wild type), the fawn-and-white, and the pure white, the last being the rarest. It is somewhat curious that no form exists, apparently, intermediate between the fawn-and-white and brown-and-white types, but a similar broad distinction exists between the cinnamon and green forms of the domestic Canary.

Of the small exotic Ploceidae *Munia maja*, *M. castaneithorax*, *Tæniopygia castanotis*, and *Estrelda astrild* are the most common; but *Poephila mirabilis*, *P. gouldiæ*, *P. acuticauda* and *P. cincta* have been imported, the two former most frequently and the latter only quite recently, together with *Ædemosyne modesta*.

Erythrura prasina, though occurring in our empire, is of course only known here as an imported bird, and does not usually do well.

I have in my prefatory remarks already alluded to the Java Sparrow as a commonly introduced bird, and now need only mention that the more or less pure white domestic form from Japan is even more constantly an occupant of the dealers' cages presumably because it sells at a much higher price, and is therefore not so readily disposed of.

FAMILY FRINGILLIDÆ.

The ubiquitous Canary is, of course, a very common cage-bird in Calcutta, and will probably tend to displace many native species in the affections of the people. Most of those sold here come from China; they are small birds, generally of the pale whitish-yellow tint known to fanciers in England as "buff," green or pied birds being relatively few, and full bright yellow and cinnamon being rarely ever seen.

I once saw a green bird (not a hybrid of any sort) marked with yellow on the quills and tail, like a Greenfinch. The note of these Chinese Canaries is very soft and pleasant, and they generally resemble the German type of bird. Maltese and a few English Canaries are also imported, the latter fetching three and four times the price of Chinese forms.

The only Indian Finch commonly kept as a songster is the "Tuti" (*Carpodacus erythrinus*); this of course loses the red colour after moulting in confinement, like other carmine-tinted Finches. Several other species, however appear in the Bazaar, generally to form part of mixed collections, viz:—*Emberiza luteola*, *Hypacanthis spinoides*, and, less commonly, *Emberiza melanocephala*, *E. aureola*, *Melophus melanicterus*, *Gymnorhis flavicollis*, and *Carduelis caniceps*. A large consignment of the last-named came down during the past winter, but the birds did not thrive as a rule. A few individuals of the Eastern form of Linnet (*Acanthis fringillirostris*) have also been brought in, and I noted that the males, when kept over the moult, lost the red, as the home Linnet does. I have also seen a few specimens of *Melopcnia pusilla*.

Of exotic Fringillidæ, *Chloris sinica* is the most common, except of course the Canary; a good many examples of *Eophona melanura* used to be imported, but they were greatly subject to disease of the feet and have not been very popular. The European Goldfinch (*Carduelis elegans*) is generally to be found, but comes in very small numbers; it does not feel the heat at all, nor does it gasp, as many native species do. Bullfinches (*Pyrrhula europæa* and *P. major*) may sometimes be had, as may also the Brambling (*Fringilla montifringilla*), the specimens of this bird being imported. A species of *Serinus* —I think *S. icterus* is not uncommon. American Cardinals (*Cardinalis virginianus* and *Paroaria cucullata*) have been brought here and have done well, but have not sold very readily.

FAMILY ALAUDIDÆ.

Larks are popular here as cage-birds, especially the "Chendool" (*Galerita cristata*) and the "Agheens" (*Mirafra*). *Melanocorypha bimaculata* is also brought down to Calcutta in numbers at the close of the cold season, while a few specimens of *M. mongolica* may generally be seen, as it is pretty regularly imported. Another Chinese Lark is often to be noticed, *Alauda gulgula*, I think—at any rate it differs, like that bird, from *A. arvensis* in its similar size, shorter wings and tail, and larger feet. These birds are expensive, costing between ten and twenty rupees, although not apparently different from Indian specimens of *A. gulgula*, which I have never seen caged. But the custom of wrapping up the cages has limited my knowledge of Larks to a very great extent.

FAMILY NECTARINIIDÆ.

Both *Arachnechthra asiatica* and *A. zeylonica* may be occasionally seen at the dealers' establishment, but can hardly be expected to thrive. Nevertheless, I have known the latter kept by Europeans for many months, and I deposited one of the former safely in the London Zoological Gardens in 1897, although it was in poor condition and did not live long. Mr. Rutledge informs me, however, that this species is kept in some places as a song-bird, so that certain natives must understand how to treat it.

FAMILY DICÆIDÆ.

A few examples of *Dicæum cruentatum* are occasionally on sale, but these birds, though they will eat bananas greedily, are not easy to keep. This is a great pity, as they are not only very pretty, but quite the tamest and most fearless of any small bird I know.

FAMILY PITTIDÆ.

A few specimens of *Pitta brachyura*—hand-reared birds—occasionally come into Mr. Rutledge's hands, but this species is certainly not common in cages. Although not a songster, it makes a very nice pet, owing to its tameness and amusing gestures.

FAMILY PICIDÆ.

The only Woodpecker caged here, and that but rarely, is the common *Brachypternus aurantius*, hand-reared specimens of which get very tame and thrive well in confinement. From the readiness with which they partake of plantains, I fancy that the species must be naturally more or less of a fruit-eater. The outer hind toe (third toe) is certainly reversible in this species—and, indeed in some other Woodpeckers that I have noticed—for it often points literally forwards when the bird is moving about in a cage. Nestlings of this species have a warty pad on the hough, and shuffle about on it without the aid of the toes.

FAMILY CAPITONIDÆ.

I have more than once seen a statement in print that Barbets do not thrive well in captivity; but this is quite a mistake, at all events as regards most Indian forms. The first Barbet I ever saw alive was an example of *Cyanops asiatica*, which lived for at least six years in the London Zoological Society's Parrot-house. This species is the easiest of all to keep, both hand-reared and wild-caught birds being exposed for sale in the Tiretta Bazaar, where some may practically always be found. Several individuals may safely be placed together in one cage, which is not the case with other Barbets, and a great many must reach Europe; indeed, the bird is only kept for export, and is certainly not unfrequently on sale in England. A few specimens of *Megalæma marshallorum* and of *Thereiceryx zeylonicus* are occasionally seen here, and *M. virens* sometimes arrives from China. The Coppersmith (*Xantholæma hæmatocephala*) is often brought in to the dealers, but never lives long, as they *will* feed it on "satoo," a diet which kills it in a very few days. Yet on bread-and-milk and fruit, or the latter only, it lives well.

FAMILY CUCULIDÆ.

The male Koël (*Eudynamis honorata*) is a very popular pet with natives, and is always on sale here. Many examples are reared from the nestling stage by hand. The young birds that I have observed do not seem to bear out the theory that both sexes are at first entirely black, and that the female assumes her proper livery later. Some young males are quite black, and others are black sparsely spotted with buff. The young females are much like the adults of that sex, but have the upper half of the head and the nape black. In all young birds the bill is black, not green, as in the old.

The only other Cuckoo I have met with commonly in cages is the "Popiya," or Brain-fever-bird (*Hierococcyx varius*), the note of which is as much esteemed by natives as it is disliked by Europeans. It does not keep its plumage in such good condition as the Koël, which seems to do very well as a cage-bird. The Crow-Pheasant (*Centropus sinensis*) is often brought in, not as a pet, but on account of some fancied medicinal virtue. I have noticed two types of young Crow-Pheasants, which never seem to occur in one brood, at least they are not sent in together. One is a large barred bird, usually taken as the typical young of the species, which is very easy to tame. The other is smaller, especially as regards the bill and feet, and shows no trace of bars, but is a dull edition of the adult. When full-fledged it is wilder than the first, has a longer tail, and is inclined to hop as well as walk. It also moults much later. This is as much as I have yet been able to make out from studying the live birds, and I am not sure whether these uniformly-coloured young are merely the males, as Jerdon says, or a distinct race, or even species. Against the latter view, and tending to prove the existence of much variation, may be instanced the fact that we have in the Indian Museum the skin of a nestling which is in *perfectly bright adult plumage*, whereas the young birds of the second type mentioned above resemble those of *C. chlororhynchus* as figured in Captain V. Legge's 'Birds of Ceylon,' or may be even duller and darker. All the young birds that I have seen have grey eyes and black bills, flesh-coloured at the base in the case of the barred specimens.

PSITTACI.

The Parrots are of course very important in the present connection, though many of them are not cage-birds in the literal sense, for they are quite as often chained, as mentioned above; this is the case even with Parrakeets and Lories. Many foreign species are imported, and some very rare forms occasionally occur; but, not being specially interested in the group I have not kept any record of these, and must confine myself to the more usual importations. But I would strongly advise any member of the B. O. U. who likes rare Parrots, or wants specimens of them, not to neglect examining the Calcutta dealers' stock, if he ever has the opportunity of so doing.

(*To be Continued.*)

THE OSPREY OR FISHHAWK; ITS CHARACTERISTICS AND HABITS.—VIII.

By Theodore Gill, Washington, D. C.

Continued from Vol. V, p. 125.

VALUE OF VARIATIONS.

The question arises, what is the systematic value of these variations? Attentive consideration has not revealed any constant difference between any of the geographical races or any morphological characteristics coincident with differences of range. While, as a rule, the American form is distinguished from the Eurasiatic by the coloration of the breast, the difference is not constant. As to the Australian form, it is generally smaller, but a few European and Eurasiatic individuals fail to attain a larger size than the average Australian and, on the other hand, giants of the latter race may exceed dwarfs of the northern forms. In view, then, of what is known at present no more than subspecific rank at most need be given to the several races. To equal rank, perhaps, the almost unknown Bahaman race may be provisionally assigned.

So far as the remarks just made concern the northern forms, the writer can corroborate the conclusions already reached by others from personal observation. As to the Australian form he has to rely entirely upon others, and especially Mr. Ridgway, as no specimen is in the collection of the United States National Museum. Under these conditions, it seems best to adopt the conclusions as expressed by Mr. Ridgway in the "History of North American Birds" (iii, p. 182). Mr. Ridgway had especially studied the question of variation in the genus Pandion for that work and examined the specimens in the Academy of Natural Sciences of Philadelphia, as well as those in the National Museum. Among them were the specimens of *Pandion leucocephalus* obtained by Gould in Australia.

As to the *Pandion ridgwayi*, no definite information can be given, and it is retained here simply on account of the impression left on Mr. Ridgway's mind after examination many years ago.

The essential or primary synonyms remain to be named and may be given in the following form.

THE EUROPEAN OSPREY.

(PANDION HALIAETUS HALIAETUS.)

Falco haliætus *Linne* Syst. Nat., ed. 10, p. 91, 1758; ed. 12, t. 1. p. 129, 1766.
Pandion (Falco haliaetus *L.*) *Cuvier* Règne An., i, p. 316, 1817.
Pandion haliætus *Baird, Brewer and Ridgway* Birds N. Am., vol. iii, p. 183, 1875.

An Osprey of normal size ("wing, 17.00–20.50; tail, 7.00–10.00; culmen, 1.20–1.45; tarsus, 1.95–3.15; middle toe, 1.50–1.90"); with "second or third quills longest (in eighteen specimens from Europe and Asia); first longer then fifth; breast always (?) spotted with brownish, or uniformly so; top of head with the black streaks usually predominating; tail with six or seven narrow black bands, continuous across both webs".

An inhabitant of the Palæarctic and Oriental and African realms.

THE AMERICAN OSPREY.

(PANDION HALIAETUS CAROLINENSIS.)

Falco Haliaëtos γ carolinensis *Gmelin Linnaei* Syst. Nat., ed. 13, t. i, p. 263, 1788.
Pandion carolinensis "Nob." *Bonaparte* List Birds Europe and N. Am., pp. 3, 1838.

An Osprey of normal size ("wing, 17.50–21.50; tail, 8.70–10.50; culmen, 1.25–1.40; tarsus, 2.00–2.40; middle toe, 1.70–2.00"); with "second and third quill longest; breast often entirely without spots; top of head and nape usually with dark streaks predominating; all with six to seven narrow black bands, continuous across both webs".

An inhabitant of America.

THE BAHAMA OSPREY.

(PANDION HALIAETUS RIDGWAYI.)

Pandion ridgwayi *Maynard*, Am. Exchange and Mart, ii, p. —, Jan. 18, 1887; p. 69, Feb. 5, 1887.

An Osprey apparently of reduced size; (wing 17); with relatively large and tumid bill ("bill, 1.35") and tarsi, ("2.35"); "entire lower parts white" and back paler than in *P. carolinensis*.

An inhabitant, so far as recorded, only of the Bahama Islands; a doubtful subspecies.

THE AUSTRALIAN OSPREY.

(PANDION HALIAETUS LEUCOCEPHALUS.)

Pandion leucocephalus Gould, Proc. Zool. Soc. London, pt. 5, p. 138, 1838; Syn. Birds Australia, pt. 3, p. 22, pl. 6, 1838.

An Osprey of reduced size ("wing, 17.50–19.50; tail, 9.00–10.00; culmen, 1.25–1.40; tarsus, 2.10; middle toe, 1.70–1.95"); with "third quill longest, but second just perceptibly shorter (eight specimens, including Gould's types); breast with the markings sometimes (in two out of the eight examples) reduced to sparse shaft-streaks, but never (?) entirely immaculate; top of the head with white streaks usually predominating, sometimes (in three out of eight specimens) immaculate white (the occiput, however, always with a few streaks); tail with six to seven white bands on the inner webs, which (according to Kaup) do not touch the shaft".

Inhabits Australia and the Moluccas.

THE END.

THE OSPREY.

An Illustrated Magazine of Popular Ornithology.

Published Monthly,

By

THE OSPREY COMPANY.

Edited by Theodore Gill and Paul Bartsch, in collaboration with Robert Ridgway, Leonhard Stejneger, Frederic A. Lucas, Charles W. Richmond, William Palmer and Harry C. Oberholser of Washington, and Witmer Stone of Philadelphia.

Contributions of a relevant nature are respectfully solicited, and should be addressed to THE OSPREY COMPANY, 321-323 4½ Street N. W., Washington, D. C.

Subscription: In the United States, Canada and Mexico, One Dollar a year, in advance. Single Copies, Ten Cents, Foreign Subscription: One Dollar and Twenty-five Cents, Postage paid to all countries in the Postal Union.
Advertising rates sent on request.

Entered as second-class matter, by THE OSPREY Company at the Washington, D. C., Post Office.

Vol. V. SEPTEMBER, 1901. No. 9.

Comments.

WORK AND WORRY FOR THE CLASSICISTS.

Some more apples of discord have been thrown into the nomenclature ring!

In the last number of the Osprey for August, some names given to genera of birds by French naturalists of a past generation were specified. We commented on their nature and wondered what our classical friends who will not tolerate bad Latin or Greek would do. The trouble of the classicists, it seems, will be still further increased by modern sinners. An Italian naturalist resident in La Plata, Dr. Florentino Ameghino, who has been very active for a number of years in the description of the exceedingly rich ancient mammalian and avian faunas of Argentina, has very recently added a number of generic names of a fearful and wonderful kind. He has apparently exhausted the resources of ordinary Latin and Greek and, fearful of giving names preoccupied in other divisions of zoology, has invented a new and strange system of nomenclature. Wishing to honor distinguished mammalogists and paleontologists, but unable to give tenable terms based on their family names alone, he has combined, in a grotesque whole, given names (sometimes first and middle) with the family. Some examples of the many results of this system of compounding follow:

AMILNEDWARDSIA (after A. Milne-Edwards).
ASMITHWOODWARDIA (A. Smith Woodward).
EDVARDOCOPEIA (Edward Cope).
EDVARDOTROUESSARTIA (Edouard Trouessart).
CAROLOAMEGHINIA (Carlo Ameghino).
RICHARDOLYDEKKERIA (Richard Lydekker).
GUILIELMOSCOTTIA (William Scott).
OLDFIELDTHOMASIA (Oldfield Thomas).

Will the classicists accept these names? Will they try to amend them? Or will they substitute new names? Undoubtedly, there will be a difference of opinion between representatives of the school. We may be sure that Dr. Cabanis and Count Salvadori, for example, would not admit such monstrosities in Ornithology. But how will others act?

These names are cacophonous; others formed against principles of good usage are euphonious.

The very recent publication of a new name for a genus of crustaceans reminds us of another strange method of nomenclature originating with an Englishman.

In 1818, W. E. Leach gave names for genera of Isopod crustaceans which have tried the ingenuity of etymologists, such as CIROLANA, OLENCIRA, CONILERA, ANILOCRA, NEROCILA and ROCINELA. Agassiz did not recognize their nature and must have been put to considerable trouble in attempting to decipher them. (Leach gave no assistance.) Two of them were designated by him as proper names ("*Nom. propr.*") but Anilocra was derived from "*ανίλεως*, immisericors [=unmerciful], *οκρίς*, acer [=prominence]" and Olencira from "*ωλην*, ulnus" [=elbow or fore arm]; *κεΐρία*, fascia [=band or girdle]". (There was no reason for such meaning names but no matter.) Rocinela and Nerocila were given up in despair, and his failure indicated by six dots (". . . . . .")!

Probably Leach had no idea of a Greek etymology for any of the words in question. Anyway, so good a historian of carcinology as the Rev. Thomas R. R. Stebbing tells us that "Leach is said to have framed" them "without any meaning or derivation, but simply by placing in various positions the same four consonants, and interspersing vowels to suit the requirements of his ear".

The words, in fact, are anagrams of each other. Evidently the basis of the words was Caroline or Carolina. The possibilities of this familiar name for anagrammatizing doubtless occurred to Leach and he began the play upon the letters and their transmutation. Verily, he seems to have imbibed as much affection for the name and been as much comforted by its repetition as was the good old woman by "that blessed word Mesopotamia" in her Bible. He was so well satisfied with it in any form, that he took the same letters (only substituting sometimes *e* for *a*) and juggled them into not less than seven new compounds, including a name (*Canolira*) not adopted by recent systematists. Still another name (LIVONECA) may have originated from a simple typographical error for Lironeca, again an anagram of Caroline.

The example thus set was not avoided, but actually followed by others. None was rejected (as some ornithologists would have done in analogous cases) but all have been accepted without serious demur. Kossman followed with another anagram (CORILANA) in 1880 and Hansen with two more (ALCIRONA and LANOCIRA) in 1890. In this year of Grace 1901 and month of September still another anagrammatic name (NALICORA) has been proposed (by Dr. H. F. Moore) for another genus of the same series. CAROLINA has not yet been used nor its palindrome ANILORAC; we may yet see them (and also ENILORAC) utilized for other genera!

Perhaps some of the readers of the OSPREY may recall the names of genera of birds that have been coined on a like principle. The best known are anagrams of the chief names of the Kingfishers, *Alcedo*, *Dacelo* and *Lacedo*. *Dacelo* (given by Leach) was rejected by Cabanis and Heine, who took Gloger's substitute *Paralcyon*, but otherwise has been generally adopted. *Lacedo* (of Reichenbach) was replaced by Cabanis and Heine with a new name (*Carcineutes*) and the latter has been almost universally accepted though *Lacedo* was given ten years earlier and really should be retained. The author of *Lacedo* has given another anagrammatic name in the same family, *Hylcaon*, an anagram of *Halcyon*.

Now, what will our classical friends do about such names? They can't be corrected for they never had a meaning or were intended to have. In other words, they were what some would call pure "nonsense names". Yet they are euphonious and serve their purpose as well as the most classical ones for those who are not too inquisitive about etymologies. But if it is conceded that such names may be adopted, why shouldn't misformed ones be also adopted—especially if they are euphonious? Just call the misformed abortions "nonsense names" and adopt them!

We by nó means defend the propriety of such names; they are truly deplorable and if unanimity could be secured for their rejection we would most heartily join the exclusionists. The question is a practical one, however. Unanimity cannot be secured. The majority of naturalists throughout the world would favor their adoption and retention. Therefore we are willing to sacrifice our own preference and adopt them in the interest of Law and Order. Diversity of opinion will be sure to exist among classicists as to what names should be retained and what adopted. Let us follow rigorous laws, then, but curse, if we will, those perverse or ignorant naturalists who throw such obstacles in the way of concord.

Notes.

ANOTHER INSTANCE OF THE SPOTTED SANDPIPER (ACTITIS MACULARIA) CARRYING ITS YOUNG.

Mr. J. C. Merritt's article on this topic in the January number of the *Auk* for 1897, page 52, recalls a similar episode.

On June 22, 1894, I was collecting in a sand pit, a mile south of Gladstone, Henderson, County, Ill. Seeing a Spotted Sandpiper much worried and distressed. I began to look for her nest, but was unable to find it. Profiting by former experiences I planted a mark in the sand to designate the approximate locality of the nest. An hour later I returned, and having approached the stake from behind a sand mound I had the pleasure to see Mrs. Sandpiper drag herself away, the sickest looking bird I ever beheld. In fact she seemed so completely prostrated, (drooping wings and spread tail,) that she resembled a turtle rather than our trim little Tip-up.

But by far more interesting to me were the three little balls of cotton which were running, (rolling I would almost wish to say), at such a remarkable rate of speed, in three different directions that, had my eyes not been riveted on one and my feet in motion, all would no doubt have been in safety. As it was I captured one of the downy bits of bird-life.

While admiring this bluffy bit of animation, I noticed the mother bird flying about me in circles, uttering that plaintive note which to me then sounded very much as if she was inviting all nature to weep, weep, weep, weep, weep, weep.

Whether one of the little ones had responded to the mothers note or whether she had discovered it in too exposed a position I am unable to tell; she suddenly alighted, ran a few steps and then flew by me to cross a little lake (puddle), with a young bird in her bill (not in the feet as Mr. Merritt's bird was transported, but in the bill). It appeared to me as if the young was carried by the neck.

I waited awhile hoping that the bird would repeat the performance with the second remaining bird, but although she kept close at hand while I scanned the few dwarfed blades of grass which grew about the place, I did not get another glimpse of the young.

I have since then observed the young of this species many times, but this is the only instance in which I have seen them transported by the parent.

During all this performance I only noticed one of the old birds, and it is not unlikely that the male was off on a hunting excursion at Sand-Lake, a quarter of a mile distant.—Bartsch.

A Few Notes from Missouri. I have been visiting the Chariton River, near Unionville, every spring and fall for several years, but never until this spring did I find the Kentucky Warbler except on rare occasions. This year, however, it is one of the most abundant birds. I have just returned from a two weeks trip to that place, and in the last four days I found three nests of these Warblers. These birds and Yellow-throats were the only Warblers nesting at this time, and only one of the Kentucky Warbler's nests contained eggs. When I found the nest on Thursday morning, May 23, it was just completed, and by night contained one egg. Next evening two eggs, and one of the Cowbird's were found. As we were going to start home that evening, I went down in the afternoon to collect nest and bird, for I had failed to identify her positively owing to her wild nature. I could not get a shot at her until about 5 o'clock, as I could not get near the nest without her flying, and she would not return while I waited. By poseing myself behind a tree near which she generally flew when leaving the nest, and having one of the boys with me approach the nest, I at last managed to secure her. On dissection I found one egg broken by shot so the full set would have been four. The nest was near the river bank, in thick timber, placed in a small hickory sprout which had a very prickly vine growing about it. It was about one foot above the ground, composed of very fine white grass, with a few leaves at the base; the other two nests were on the ground, in thick bushes, and were much more bulky than this one, and composed largely of leaves. Two of the eggs were faintly marked with red; one heavily blotched at the larger end.—W. T. Rinker.

We are sorry to state that the photograph is not clear enough to permit of reproduction. We hope Mr. Rinker will have better success in this direction next season and will give us an account of his 1902 experiences with Geothlypis (Opornis) formosa.—Ed.

Attempted Introduction of Capercailzie. "Reciprocity in game birds seems to be the doctrine just now being practiced by the United States and Sweden," said a prominent commission merchant of this city to a Star reporter recently. "Five thousand 'Bob Whites,' in a lively and healthy condition, have just been shipped to that country, at a cost of $3,500. They have been forwarded in cages constructed specially for the purpose, and the best hopes are entertained that the birds will do well in their new home, inasmuch as a few introduced in Sweden last year on the estate of Count Lewenhaupt at Fosslorjo have done excellently, enduring the winter very well.

"Not long ago Sweden sent us a number of specimens of one of her most valuable game birds, the Capercailzie. This bird is the largest and noblest of the grouse family, to which our Prairie Chicken and Pheasant belong. A Capercailzie weighs as much as twelve pounds, approaching in size the American Wild Turkey. Extremely hardy, it abounds in the great forests of the Scandinavian Peninsula, Finland, Russia and northern Asia. It endures the severest cold, often burrowing into the snow in very bitter weather for warmth and shelter. Whether they will do well in this country is a question which it will take a longer time to decide".—*Evening Star.*

The Death of Francis Joseph Birtwell removes a former contributor to The Osprey. Mr. Birtwell had little more than passed the threshhold into manhood, having reached the legal age only last September. He was born in September, 1880, at London, England, but was brought at an early age to Boston, Mass. He passed through public schools of Boston and thence into the Bussy Institute. In the summer of 1899 he studied in the Biological Laboratory of the Brooklyn Institute. The premonitory symptoms of consumption which became manifest while there compelled him to give up his life in the east and he removed to New Mexico in hope that the dry air of that territory would prolong his life. He continued his studies in the University of New Mexico and devoted especial attention to the birds of the territory. He sought the objects of his investigations in the open as well as dissected them in the closet and it was in the attempt to secure a nest at a height of sixty odd feet above the ground that he fell and death ensued from his injuries. He had arranged to complete a volume on "the Ornithology of New Mexico" which was to be accepted as a thesis on his graduation from the University. Last May he was married to Miss Olivia Morton of Iowa.

Mr. Birtwell contributed an illustrated article on "Aptosochromatism in *Chrysotis levaillanti*", the Mexican Yellow-headed Amazon Parrot, to the Osprey for April, 1899, (iii, 113 117,) which was highly eulogized by Doctor Coues. He was also a contributor to the *Auk* and other periodicals.

Ospreys Wanted.

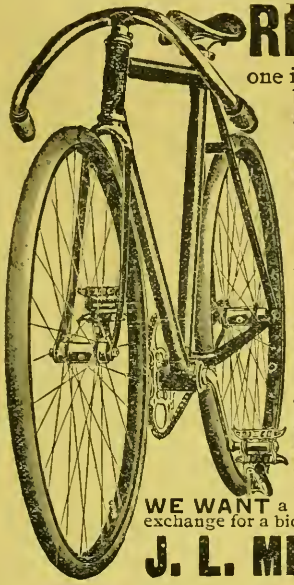
The OSPREY COMPANY wants numbers of the OSPREY for October and December, 1896. A year's subscription will be given for each number.

Address OSPREY COMPANY, 321 and 323 4½ Street, N. W., Washington, D. C.

FOLIAGE GRASSES, &c.,
FOR MOUNTING BIRDS,
INSECTS AND MAMMALS

As used at South Kinsington, New York and principal Museums. Estimates given.

MR. H. MINTORN & MRS. MOGRIDGE,
39 West 99th Street,
New York.



RIDER AGENTS WANTED

one in each town to ride and exhibit a sample 1901 model bicycle of our manufacture. **YOU CAN MAKE $10 TO $50 A WEEK** besides having a wheel to ride for yourself.

1901 Models High Grade Guaranteed **$10 to $18**

'00 & '99 Models Best Makes **$7 to $12**

500 Second Hand Wheels taken in trade by our Chicago retail stores, many good as new.... .... **$3 to $8**

We ship any bicycle **ON APPROVAL** to anyone *without a cent deposit in advance* and allow **10 DAYS FREE TRIAL.** You take absolutely *no risk* in ordering from us, as you do not need to pay a cent if the bicycle does not suit you.

DO NOT BUY a wheel until you have written for our FACTORY PRICES and FREE TRIAL OFFER. This liberal offer has never been equaled and is a guarantee of the quality of our wheels.

WE WANT a reliable person in each town to distribute catalogues for us in exchange for a bicycle. Write today for free catalogue and our special offer.

J. L. MEAD CYCLE CO., Chicago.

For Sale or Exchange

Strictly first-class Southern Sea-birds' Eggs in Sets with full and accurate data, viz:

American Oystercatcher, Royal Tern, Willet, Wilson's Plover, Clapper Rail, Brown Pelican, Laughing Gull, Foster's Tern, Black Skimmer, Boat-tail Grackle, and many

Others, very cheap for

Cash or A 1 Sets.

DR. M. T. CLECKLEY,
459 Green Street,
Augusta, Ga.

WALTER F. WEBB,

ALBION, NEW YORK.

Always has for sale hundreds of fine specimens of interest to Ornithologists and Oologists, as well as books, supplies and back numbers of publications. Our little Manual of 100 pages is still the handiest thing you can have.

Prices all eggs and skins, and contains an immense lot of other practical information. Only 15 cents. Correspondence a pleasure. Let us hear from you.

The Forester.

During the coming Year **THE FORESTER,** the Illustrated Monthly Magazine of the American Forestry Association, will be more interesting and valuable than ever before. No one who cares for trees or life in the woods, or who is interested in the movement to encourage the preservation and care of the forests should be without it.

Among the contributors are Gifford Pinchot, Chief of the U. S. Division of Forestry; Dr. B. E. Fernow, Dean of the New York State College of Forestry; Henry Gannett, Geographer of the U. S. Geological Survey; Dr. John Gifford; Prof. Henry S. Graves, of the Yale Forest School; Dr. C. A. Schenck, of Biltmore, N. C.; Hon. James Wilson, Secretary of Agriculture; Prof. Wm. R. Dudley, of Stanford University, Cal.; Prof. N. S. Shaler, of Harvard Universaty; and many others of note and authority on their specialties.

Besides a number of contributed articles, each issue of the Magazine will contain a record of legislation touching the interests of the country's forests (of which there will probably be a great deal during the coming year) with editorial comments, and reviews of recent publications by the most competent experts. Each number is handsomely illustrated. For a sample copy send a two cent stamp to

THE FORESTER,
202 Fourteenth St. S. W.,
Washington, D. C.

THE FORESTER is sent to members of the **American Forestry Association** free of charge. Annual membership dues, $2.00. Life membership, $1.00. Sustaining membership, $25 per year. The association is engaged in work which is of the greatest importance, and for the progress of which all the moral and financial support obtainable is needed.

To join the Association address the *Secretary*,
202 Fourteenth Street S. W.,
Washington, D. C.

CHOICE NORTH DAKOTA SETS.

	PER EGG.		PER EGG.
Western Willet	.40	Ferruginous Rough-leg Hawk	.60
Bart. Sandpiper	.15	Short Eared Owl	.40
Wilson's Phalarope	.25	Am. Long Eared Owl	.15
Kildeer	.10	Green Wing Teal	.30
Spotted Sandpiper	.10	Gadwall	.20
Belted Piping Plover	.50	Canvas-back Duck	.30
Prairie Sharp-tail Grouse	.20	Red-head Duck	.10
Ch. Collared Longspur	.15	Shoveller	.10
Swainson Hawk	.20	Mallard	.08
Marsh Hawk	.20	Am. Golden-eye	.20

First-class with data. Personally collected. No exchanges. Carriage prepaid by express on order exceeding $3.00. On order exceeding $10 net will allow discount 10 per cent.

References: J. P. Norris, Jr., William Brewster and others.

EUGENE S. ROLFE,
Minnewaukan, N. Dak.

The Plant World.

A MONTHLY JOURNAL OF POPULAR BOTANY.

Bright, Readable and Instructive.

EDITED BY
F. H. KNOWLTON and CHARLES LOUIS POLLARD.

The first number of Volume IV will appear January 1, 1901, with another associate, and will contain 16 pages, illustrated, together with a monthly supplement of 8 pages devoted to a series of popular articles on the Families of Flowering Plants, also profusely illustrated. This course will be just what is needed by those who desire some knowledge of the flowering plants, but who have neither time nor inclination for the study of ordinary text-books.

The Subscription Price of Plant World is Unchanged!
ONE DOLLAR PER YEAR.

Send in your subscriptions promptly, and make sure of welcome reading twelve months in the year.

Address all communications to

THE PLANT WORLD COMPANY,
P. O. BOX 334,
WASHINGTON, D. C.

THE OÖLOGIST

(of Albion, N. Y.)

IS THE OLDEST PUBLICATION IN AMERICA.

The Oölogist is the cheapest "Bird" publication in the world (for only 50 cents you receive $1.00 worth of premiums, your selection, 25c. worth of advertising and the Oölogist for a whole year).

The Oölogist, has a larger paid circulation than, all other "Bird" publications in America combined.

The Oölogist has long been recognized the best Advertising Medium in its line in the world. The "*Country Gentlemen*" is the leading Agricultural newspaper in America, and in soliciting advertising for its columns, it makes its strongest hit in the following statement: "As to quantity of circulation it publishes many more 'Want Ads' than *all other papers combined*. You doubtless know what a Want Ad' circulation must be *and always is*?"

From this same stand point The Oölogist's rank among publications devoted not only to Ornithology but Natural History as well, is identical to that of the Country Gentlemen among agricultural publications.

The Oölogist has very few half-tones and contains only 16 pages each issue—one-half of which are advertisning.

During the past fifteen years, (The Oölogist's age) many superior "Bird" publications and scores of inferior ones have dropped by the way. The Oölogist, however, is still issued each month and a sample copy of a recent issue can always be obtained by addressing a postal to

FRANK W. LATTIN, Publisher,
ALBION, N. Y.